

WHAT IS CLAIMED IS:

1. A projector apparatus comprising:
 - a light source means for outputting a white light;
 - 5 a color wheel means for receiving the white light from said light source means to output a plurality of primary-color lights;
 - a digital micromirror device means for receiving the primary-color lights and for reflecting lights for constituting a picture;
 - a projection optics means for passing the light from said digital micromirror device means to obtain a picture enlarged to a desired size;
 - 10 a shutter disposed downstream of said projection optics means for blocking the light for projection passed through said projection optics means;
 - a sensor means, attached to that surface of said shutter which blocks the light for projection, for detecting a color temperature of the light for projection; and
 - 15 a control means for controlling said color wheel means and said digital micromirror device means such that the light from said digital micromirror device means constitutes a predetermined picture in accordance with data for the picture and for performing, based on detection result from said sensor means, such a control that the color temperature of the light for projection is adjusted to a desired value.
2. A projector apparatus according to claim 1, wherein said shutter is supported by a casing constituting a body of said apparatus and arranged so as to block or allow to pass the light for projection.
- 25 3. A projector apparatus according to claim 1, wherein said shutter is a cap for protecting the last-stage lens of said projection optics means.

4. A projector apparatus according to any one of claims 1 to 3, wherein said control means is constructed to change an output level of the light for projection from said projection optics means from 100% to a level
5 substantially equal to 0% in steps and to carry out the adjustment of color temperature at each output level.
5. A projector apparatus according to claim 4, wherein, in relation to the change of output level of the light for projection from said projection optics
10 means from 100% to the level substantially equal to 0%, said control means comprises a memory means for storing reference values corresponding to the respective output levels.
6. A projector apparatus comprising:
15 an apparatus body;
a light source means provided within said apparatus body for outputting a white light;
a color splitting device for receiving the white light from said light source means to split the white light into a plurality of primary-color lights;
20 digital micromirror device means each for receiving a respective one of the plurality of primary-color lights and for reflecting light constituting a picture;
a projection optics means for passing the light from said digital micromirror device means to obtain a picture enlarged to a desired size;
25 a shutter disposed downstream of said projection optics means for blocking the light for projection passed through said projection optics means;
a sensor means, attached to that surface of said shutter which blocks the light for projection, for detecting a color temperature of the light for

projection;

a control means for controlling said digital micromirror device means such that the light from said digital micromirror device means constitutes a predetermined picture in accordance with data for the picture and for

- 5 performing, based on detection result from said sensor means, such a control that a white balance of the light for projection is adjusted to a desired value;

a sliding means for sliding said projection optics means relative to said apparatus body in a parallel relation to an optical axis of said projection optics means; and

- 10 a follow-up means for sliding said sensor means, when said projection optics means is slid by said sliding means relative to said apparatus body, in such a manner that said sensor means follows said projection optics means to thereby enable said sensor means to detect the color temperature of the light for projection from the sliding projection optics means.

15

7. A projector apparatus comprising:

an apparatus body;

a light source means provided within said apparatus body for outputting a white light;

- 20 a color wheel means for receiving the white light from said light source means to split the white light into a plurality of primary-color lights; digital micromirror device means each for receiving a respective one of the primary-color lights and for reflecting light constituting a picture;

a projection optics means for passing the light from said digital

- 25 micromirror device means to obtain a picture enlarged to a desired size;

a shutter disposed downstream of said projection optics means for blocking the light for projection passed through said projection optics means;

a sensor means, attached to that surface of said shutter which blocks

the light for projection, for detecting a color temperature of the light for projection;

a control means for controlling said color wheel means and said digital micromirror device means such that the lights from the plural digital

5 micromirror device means constitute a predetermined picture in accordance with data for the picture and for performing, based on detection result from said sensor means, such a control that a white balance of the light for projection is adjusted to a desired value;

a sliding means for sliding said projection optics means relative to
10 said apparatus body in a parallel relation to an optical axis of said projection optics means; and

a follow-up means for sliding said sensor means, when said projection optics means is slid by said sliding means relative to said apparatus body, in such a manner that said sensor means follows said projection optics means to
15 thereby enable said sensor means to detect the color temperature of the light for projection from the sliding projection optics means.

8. A projector apparatus according to claim 6 or claim 7, wherein said follow-up means comprises a supporting member for supporting said

20 projection optics means, said shutter being provided in the same system of motion as said supporting member.

9. A projector apparatus comprising:

an apparatus body;

25 a light source means provided within said apparatus body for outputting a white light;

a color splitting device for receiving the white light from said light source means to split the white light into a plurality of primary-color lights or

- a color wheel means for receiving the white light from said light source means to split the white light into a plurality of primary-color lights;
- digital micromirror device means each for receiving a respective one of the plurality of primary-color lights outputted by said color splitting
- 5 device or said color wheel means to reflect light for constituting a picture;
- a projection optics means for passing the lights from said digital micromirror device means to obtain a picture enlarged to a desired size;
- a shutter disposed downstream of said projection optics means for blocking the light for projection passed through said projection optics means;
- 10 a sensor means, attached to that surface of said shutter which blocks the light for projection, for detecting a color temperature of the light for projection;
- a control means for controlling said digital micromirror device means such that the lights from said digital micromirror device means constitute a
- 15 predetermined picture in accordance with data for the picture and for performing, based on detection result from said sensor means, such a control that a white balance of the light for projection is adjusted to a desired value;
- a sliding means for sliding said projection optics means relative to said apparatus body in a parallel relation to an optical axis of said projection
- 20 optics means; and
- a follow-up means for sliding said sensor means, when said projection optics means is slid by said sliding means relative to said apparatus body, in such a manner that said sensor means follows said projection optics means to thereby enable said sensor means to detect the color temperature of the light
- 25 for projection from the sliding projection optics means.

10. A projector apparatus according to claim 9, wherein said follow-up means comprises a supporting member for supporting said projection optics

means, said shutter being provided in the same system of motion as said supporting member.